AMENDMENTS TO THE SPECIFICATION

IN THE SPECIFICATION:

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Please amend the paragraph beginning at line 31, through page 14, line 19 as indicated below:

In Fig. 5, an optical signal transmitted from a not-shown optical transmitter or the like is input to the optical receiver. The optical input signal received is amplified by the optical amplifier 10 and, then, divided into the two paths, that is, the path 1 and the path 2, by the optical divider 11. The optical input signals divided into the two paths are converted into electrical signals by the OE converters 12a and 12b and output to the discriminators 13a and 13b. The discriminators 13a and 13b output discrimination results (digital data signals) obtained by discriminating the analog electrical signals based on the predetermined thresholds V_{th1} and V_{th2} to the operational circuit 50. The operational circuit 50 outputs an operation result obtained by performing a predetermined operation based on the discrimination results of the discriminators 13a and 13b. On the other hand, the ~~BER monitoring unit 51~~ discrimination-threshold control circuit 52 monitors a bit error rate based on the output of the operational circuit 50 and outputs a monitoring result to the BER monitoring unit 51. The discrimination-threshold control circuit 52 controls discrimination thresholds of the discriminators 13a and 13b to reduce the bit error rate.

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Please amend the paragraph beginning at line 15, through line 23 as indicated below:

Operations of an optical receiver shown in Fig. 6 are explained below. In the figure, an optical signal transmitted from a not-shown optical transmitter is input to the optical receiver. The optical input signal received is amplified by the optical amplifier 10 and, then, subjected to polarization control by the ~~optical polarization controller 69~~ optical polarization controller 60, and divided into the two paths, that is, the path 1 and the path 2, by the optical polarization divider 61.

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Please amend the paragraph beginning at line 8, through line 14 as indicated below:

Therefore, even when the ~~optical polarization controller 69~~ optical polarization controller 60, the optical polarization divider 61, and the optical couplers 62a and 62b are present on paths of an optical signal, as in the first embodiment, there is an effect that reception sensitivity is improved by the OE converters 12a and 12b, the discriminators 13a and 13b, and the operational circuit 14.

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Please amend the paragraph beginning at line 19, through page 19, line 3 as indicated below:

In Fig. 7, an optical signal transmitted from a not-shown optical transmitter or the like is input to the optical receiver. The optical input signal received is amplified by the optical

amplifier 10 and, then, divided into the two paths, that is, the path 1 and the path 2, by the optical divider 11. The optical input signals divided into the two paths are converted into electrical signals by the OE converters 12a and 12b and output to the soft decision discriminators 70a and 70b. The soft decision discriminators 70a and 70b output discrimination results (digital data signals) obtained by discriminating the analog electrical signals based on predetermined thresholds ~~V_{th1}, V_{th1}, ..., V_{th2}~~ V_{th1}, V_{th2}, ..., V_{thn} to the operational circuits 71-1, 71-2, ..., 71-n. Each of the operational circuits 71-1, 71-2, ..., 71-n outputs an operation result obtained by performing a predetermined operation based on the discrimination results of the soft decision discriminators 70a and 70b.